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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,515	09/29/2006	Gerhard Bock	3717483-00083	1134

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
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EXAMINER
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REILLY-DIAKUN, JORI S

ART UNIT	PAPER NUMBER
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2878

NOTIFICATION DATE	DELIVERY MODE
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02/17/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/599,515	<b>Applicant(s)</b> BOCK ET AL.	
	<b>Examiner</b> Jori S. Reilly-Diakun	<b>Art Unit</b> 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

*This Office Action is in response to the Applicants' communication* filed (RCE and Amendment) on 10 January 2011. In virtue of this communication, Claims 3-6 are currently presented in the instant application.

#### **Claim Objections**

1. Claim 3 is objected to because of the following informalities: --,-- should be placed after “at least one light sensor” (Line 6) and “at least one light sensor” (Line 7). **Appropriate correction is required.**

#### **Claim Rejections - 35 USC § 112**

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**With respect to Claims 3-6**, the limitation of “a counter content” has been amended to the claims. It is unclear for the claims (and Applicant's disclosure; see Paragraph [0038] of the Specification for only support for the limitation) what is intended by the limitation “a counter content”, thereby rendering the claim's scope indefinite. As Applicant notes in “Remarks” - “For example, the claimed system may require the detection of a specific regular signal or pattern (as opposed to a random signal)”. Therefore, based on Applicant's own omissions, the possible interpretations of “a counter content” include, but are not limited to, “detection of a

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specific regular signal”, “detection of a specific pattern”, or detection of a random signal (because it “the claimed system may require” a regular signal, but it also “may” alternatively require a random signal). Based on all possible interpretations and for purposes of examination, “a counter content” has been interpreted to mean a means of the controller used to record or registering on a memory, or processing system, a chronological sequence of events from the light sensor.

### **Claim Rejections - 35 USC § 102**

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakajima (Pub. No.: US 2002/0122217 A1).

**With respect to Claim 3**, Nakajima discloses, in Fig. 21, an optical scanning system for projecting a laser comprising an oscillating mirror (movable mirror; see Fig. 21), a laser light source (laser diode 2411), wherein a projection light bundle is produced starting from the laser light source using the oscillating mirror (see Fig. 21), and at least one light sensor (photodiodes 2406, 2407) is arranged at an edge region of the projection light bundle (see Fig. 21), the at least one light sensor, using a modulate brightness level (wherein photodiodes detect

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brightness/intensity and wherein the brightness is modulated by the laser diode 2411) obtained from the at least one light sensor, and a control circuit to detect a position of the oscillation mirror and a specific characteristic by a counter content of the modulated brightness level (see Page 13, [0145], Lines 24-39; wherein the photodiodes 2406, 2407 detect the position of the scan mirror using the modulated brightness level, record and count the registry of a characteristic of the modulated brightness level, particularly intensity, and use said information to monitor the oscillation status and correct the optical scanning function).

**With respect to Claim 4**, Nakajima further discloses that the brightness of the projection light bundle is modulated at least in a partial region of an image to be projected and that the position of the oscillating mirror is determined by correlating the modulation of the projection light bundle with a detector signal from the light sensor (see Page 13, [0145]-[0146]; wherein the brightness of the projection light bundle is modulated at in the region of projection and wherein photodiodes register the modulated brightness and correlate the registry of said modulated brightness with the modulation performed by the control circuit on laser diode 2411 thereby determining the position of the oscillating mirror and the behavior thereof).

**With respect to Claim 5**, Nakajima discloses, in Fig. 21, a method of operating an optical system for projecting with a laser comprising modulating a brightness level at least in a partial region of an image to be projected in the projection system (see Page 13, [0145]-[0146]; wherein the brightness is modulated by the laser diode 2411), obtaining a modulated brightness level and using said modulated brightness level for detecting the oscillation status of an

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oscillating mirror, a position of the oscillating mirror, and a specific characteristic by a counter content of the modulated brightness level using the modulated brightness level obtained from light sensor and using a control circuit (see Page 13, [0145], Lines 24-39; wherein the photodiodes 2406, 2407 detect the position of the scan mirror using the modulated brightness level, record and count the registry of a characteristic of the modulated brightness level, particularly intensity, and use said information to monitor the oscillation status and correct the optical scanning function).

**With respect to Claim 6**, Nakajima further discloses that the position of the oscillating mirror is determined by correlating the modulation with a detector signal generated from the light sensor (see Page 13, [0145]-[0146]; wherein the brightness of the projection light bundle is modulated at in the region of projection and wherein photodiodes register the modulated brightness and correlate the registry of said modulated brightness with the modulation performed by the control circuit on laser diode 2411 thereby determining the position of the oscillating mirror and the behavior thereof).

### **Response to Arguments**

9. Applicant's arguments filed 20 September 2010 (original filed 13 July 2010) have been fully considered but they are not persuasive.

**With respect to the objection to Claim 3**, Applicant states that "The Office Action objected claim 3 due to a missing comma. Claim 34 is hereby amended to include the suggested

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comma. Accordingly, Applicant respectfully requests that this objection be withdrawn.”

Examiner respectfully submits that no comma has been added. As such, the objection has not been withdrawn. Please see “Claim Objections” for required changes.

**With respect to Claims 3 and 5**, Applicant’s arguments, see Remarks, filed 10 January 2011, with respect to the rejections under 35 U.S.C. 112 First Paragraph, specifically noting the amendment to the claims removing the word counter, have been fully considered and are persuasive. The rejections of Claims 3 and 5 (and their associated dependent claims) have been withdrawn. Applicant is advised that the rejection under 35 U.S.C. 112 Second Paragraph have not been withdrawn as discussed above.

**With respect to Claims 3 and 5**, Applicant asserts that, with respect to the rejection under 35 U.S.C. 102(b), Nakajima is deficient in that it fails to teach the feature such that “the claimed system may require the detection of a specific regular signal (as opposed to a random signal)”. Examiner respectfully disagrees. While Examiner agrees that “Nakajima fails to teach [the detection of a specific regular signal (as opposed to a random signal)]”, Examiner respectfully disagrees with Applicant’s conclusions regarding the impropriety of the rejection as the claim as presented does not require the feature argued, merely requiring the detection of a signal (random or otherwise) as acknowledge by Applicant (“the claimed system **may require...**”).

### **Inquiry**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jori S. Reilly-Diakun whose telephone number is (571) 270-7555. The examiner can normally be reached on 7:30 AM to 5 PM EST, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. R./  
Examiner, Art Unit 2878  
02/04/2011

/Tony Ko/  
Primary Examiner, Art Unit 2878